Dublin City University
School of Electronic Engineering

# Risk Assessment Experimental Method Form for Undergraduate and Taught PG Projects

**All operations/procedures being assessed (give specific details):**

1. Server Configuration
2. Audio Client, DAC and Amplifier Circuit Setup and Testing
3. Location Tracking Testing

**Risk Category Rating:**

1. D
2. C
3. D

**Known or expected hazards associated with the activity:**

1. Potential "Trip Hazards" due to the cabling required to both power the server, and to connect it to the available access point.
2. Possible "Shock Hazards" in working with mains voltage, or DC voltages from batteries in powering the DAC and amplifier.
3. Possible "Trip Hazards" in testing location tracking due to distraction caused from being mobile while using a smartphone or laptop.

**Precautions to be taken to reduce the level of risk:**

1. Be aware of surroundings at all times while working around cabling.
Keep cabling as neat as possible to mitigate the amount of clutter which could cause tripping.
2. Use appropriate equipment while making electrical measurements on Amp and DAC circuitry.
Do not raise amplifier output volume past safe listening levels. Exposure to prolonged unsafe listening levels may lead to hearing damage such as tinnitus.
3. Be aware of surroundings at all times.
Mobile devices will cause distractions while testing tracking, testing in uncluttered or open spaces will reduce the possibility of collisions with other people or stationary objects.

**Training prerequisite**:

1. None
2. Ensure user has training in the applicable electrical measurement equipment.

3. None

**Risk remaining:**

1. Provided the aforementioned precautions are followed, risk level is low. Tripping may still occur but awareness will sufficiently lower the associated risk.

2. The risk remaining on following the aforementioned precautions will be dependent on the voltages being used. Use and measurement of mains voltages will be high risk, however, use of battery voltages, and typical 3.5V and 5V power supplies for small micro-controller and amplifier circuits will result in low risk.
Awareness as to the dangers of high volumes for hearing will greatly reduce the risk of overexposure to dangerously loud signals.

3. Provided the aforementioned precautions are followed, risk level is low. Tripping may still occur but awareness will sufficiently lower the associated risk.

**Emergency procedures:**

Call emergency services should any serious accident occur.

**Detail references if any:**

**For the Project Worker and Project Supervisor:**

We have carried out a risk assessment for the above operation/procedure in accordance with those guidelines as detailed in the School Safety Handbook.

Signature of Project Worker..... Michael Lenehan ..... Date..21/11/19

Print name of Project Worker..MICHAEL LENEHAN

Signature of Project Supervisor..... Date.....

Print name of Project Supervisor.....

Technical Officer assigned to Project.....Liam Meany.

**N.B.**

- Copies of completed forms should be submitted to the Project Supervisor and the Technical Officer assigned to the project.
- A signed copy of the completed form should be kept in close proximity to the project bench/space where the project is taking place.